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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG	10	Time limit for inactive STN sessions doubles to 40
				minutes
NEWS	3	AUG	18	COMPENDEX indexing changed for the Corporate Source
				(CS) field
NEWS	4	AUG		ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS	5	AUG	24	CA/CAplus enhanced with legal status information for
	_	~	0.0	U.S. patents
NEWS	6	SEP	09	50 Millionth Unique Chemical Substance Recorded in
NIEGO	7	CED	11	CAS REGISTRY
NEWS	7	SEP	11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS	8	OCT	21	Derwent World Patents Index Coverage of Indian and
CMU	0	001	21	Taiwanese Content Expanded
NEWS	9	OCT	21	Derwent World Patents Index enhanced with human
NEWD		001	21	translated claims for Chinese Applications and
				Utility Models
NEWS	10	NOV	23	Addition of SCAN format to selected STN databases
NEWS		NOV		Annual Reload of IFI Databases
NEWS		DEC		FRFULL Content and Search Enhancements
NEWS	13	DEC	01	DGENE, USGENE, and PCTGEN: new percent identity
				feature for sorting BLAST answer sets
NEWS	14	DEC	02	Derwent World Patent Index: Japanese FI-TERM
				thesaurus added
NEWS	15	DEC	02	PCTGEN enhanced with patent family and legal status
				display data from INPADOCDB
NEWS	16	DEC	02	USGENE: Enhanced coverage of bibliographic and
	4.0		0.1	sequence information
NEWS	1 /	DEC	21	New Indicator Identifies Multiple Basic Patent
				Records Containing Equivalent Chemical Indexing
NEWS	10	JAN	1 2	in CA/CAplus Match STN Content and Features to Your Information
CMU	10	UAN	12	Needs, Quickly and Conveniently
NEWS	19	JAN	25	Annual Reload of MEDLINE database
NEWS	-	FEB	-	STN Express Maintenance Release, Version 8.4.2, Is
112110				Now Available for Download
NEWS	21	FEB	16	Derwent World Patents Index (DWPI) Revises Indexing
				of Author Abstracts
NEWS	22	FEB	16	New FASTA Display Formats Added to USGENE and PCTGEN
NEWS	23	FEB	16	INPADOCDB and INPAFAMDB Enriched with New Content
				and Features
NEWS	24	FEB	16	INSPEC Adding Its Own IPC codes and Author's E-mail
				Addresses

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

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COST IN U.S. DOLLARS

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ENTRY SESSION
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Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 MAR 2010 HIGHEST RN 1208066-55-0 DICTIONARY FILE UPDATES: 5 MAR 2010 HIGHEST RN 1208066-55-0

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

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http://www.cas.org/support/stngen/stndoc/properties.html

- => d ibib sqide 1-14
- L1 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2010 ACS on STN
- RN 1025170-10-8 REGISTRY
- CN L-Arginine, L-histidyl-L-seryl-L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl-L-arginyl-L-

OTHER NAMES:

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PROTEIN SEQUENCE
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Sequence | Patent
Source | Reference
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Not Given | WO2008056726
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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CI
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SR
     CA
LC
     STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P
        Roles from patents: BIOL (Biological study); PREP (Preparation); PRP
        (Properties); USES (Uses)
                  1 REFERENCES IN FILE CA (1907 TO DATE)
                  1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
REFERENCE 1
ACCESSION NUMBER:
                              148:554092 CA
                              Glp-1 derivative and use thereof
TITLE:
                              Jomori, Takahito; Hayashi, Yuji; Makino, Mitsuhiro
INVENTOR(S):
PATENT ASSIGNEE(S):
                              Sanwa Kagaku Kenkyusho Co., Ltd., Japan
                              PCT Int. Appl., 25 pp.
SOURCE:
                              CODEN: PIXXD2
DOCUMENT TYPE:
                              Patent
LANGUAGE:
                              Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
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      WO 2008056726 A1 20080515
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, VC, VC, MD, BU, TI, TM
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                                                    JP 2006-304380 20061109
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      JP 2010043001 A 20100225
PRIORITY APPLN. INFO.:
REFERENCE COUNT:
                              46
                                     THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS
                                     RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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ANSWER 2 OF 14 REGISTRY COPYRIGHT 2010 ACS on STN

4: PN: WO2008056726 SEQID: 5 claimed protein

CN

FS

T.1

RN 856221-77-7 REGISTRY

CN L-Arginine, L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutaminyl-L-alanyl-L-alanyl-N6-acetyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-N6-acetyl-L-lysylglycyl-L-arginyl- (CA INDEX NAME)

OTHER NAMES:

CN 11: PN: WO2005060986 SEQID: 11 claimed protein

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 29

NTE modified (modifications unspecified)

PATENT ANNOTATIONS (PNTE):

SEQ 1 EGTFTSDVSS YLEGQAAKEF IAWLVKGRR

HITS AT: 1-29

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C150 H229 N39 O47

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-C

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

ACCESSION NUMBER: 149:260057 CA

TITLE: GLP-1 (9-36) and its variants for inhibiting hyperglycemia or free fatty acid-induced reactive

oxygen formation in mammalian cells and thereby

preventing disease INVENTOR(S): Brownlee, Michael A.

PATENT ASSIGNEE(S): Yeshiva University, USA; Albert Einstein College of

Medicine

SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.

Ser. No. 582,116. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND					ND	DATE APPLICATION NO. DATE											
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US 2003-529247P 20031212
PRIORITY APPLN. INFO.:
                                                      WO 2004-US40852 20041207
                                                      US 2007-582116 20070626
REFERENCE 2
ACCESSION NUMBER: 143:91055 CA
                              Glp-1 (9-36) methods and compositions
TITLE:
                            Brownlee, Michael A.
Albert Einstein College of Medicine of Yeshiva
INVENTOR(S):
PATENT ASSIGNEE(S):
                              University, USA
SOURCE:
                               PCT Int. Appl., 28 pp.
                               CODEN: PIXXD2
DOCUMENT TYPE:
                               Patent
LANGUAGE:
                               English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
      PATENT NO. KIND DATE
                                                    APPLICATION NO. DATE
      WO 2005060986 A1 20050707 WO 2004-US40852 20041207

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REFERENCE COUNT:
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      ANSWER 3 OF 14 REGISTRY COPYRIGHT 2010 ACS on STN
L1
      856221-75-5 REGISTRY
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      N6-acetyl-L-lysylglycyl-L-arginyl- (CA INDEX NAME)
OTHER NAMES:
CN 9: PN: WO2005060986 SEQID: 9 claimed protein
FS
      PROTEIN SEQUENCE; STEREOSEARCH
NTE modified (modifications unspecified)
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modification Lys-26 - acetyl<Ac>
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PATENT ANNOTATIONS (PNTE):

SEQ 1 EGTFTSDVSS YLEGQAAKEF IAWLVKGRR

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HITS AT: 1-29

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C148 H227 N39 O46

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES

(Uses)

Absolute stereochemistry.

PAGE 1-C

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

ACCESSION NUMBER: 149:260057 CA

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oxygen formation in mammalian cells and thereby

preventing disease INVENTOR(S): Brownlee, Michael A.

PATENT ASSIGNEE(S): Yeshiva University, USA; Albert Einstein College of

Medicine

SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.

Ser. No. 582,116. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND					ND	DATE APPLICATION NO. DATE											
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ACCESSION NUMBER: 143:91055 CA
                              Glp-1 (9-36) methods and compositions
TITLE:
                             Brownlee, Michael A.
Albert Einstein College of Medicine of Yeshiva
INVENTOR(S):
PATENT ASSIGNEE(S):
                               University, USA
SOURCE:
                               PCT Int. Appl., 28 pp.
                               CODEN: PIXXD2
DOCUMENT TYPE:
                               Patent
LANGUAGE:
                               English
FAMILY ACC. NUM. COUNT: 2
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                                6
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                                       RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L1
      856221-72-2 REGISTRY
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CN
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      L-valyl-L-lysylglycyl-L-arginyl- (CA INDEX NAME)
OTHER NAMES:
CN
     6: PN: WO2005060986 SEQID: 6 claimed protein
FS
      PROTEIN SEQUENCE; STEREOSEARCH
NTE modified (modifications unspecified)
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           ----- location ----- description
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modification Lys-18 - acetyl<Ac>

PATENT ANNOTATIONS (PNTE):

SEQ 1 EGTFTSDVSS YLEGQAAKEF IAWLVKGRR

HITS AT: 1-29

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C148 H227 N39 O46

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES

(Uses)

Absolute stereochemistry.

PAGE 1-C

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

INVENTOR(S):

ACCESSION NUMBER: 149:260057 CA

TITLE: GLP-1 (9-36) and its variants for inhibiting hyperglycemia or free fatty acid-induced reactive

oxygen formation in mammalian cells and thereby

preventing disease Brownlee, Michael A.

PATENT ASSIGNEE(S): Yeshiva University, USA; Albert Einstein College of

Medicine

SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.

Ser. No. 582,116. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

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US 2003-529247P 20031212
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ACCESSION NUMBER:
                            143:91055 CA
TITLE:
                             Glp-1 (9-36) methods and compositions
INVENTOR(S):
                             Brownlee, Michael A.
PATENT ASSIGNEE(S):
                             Albert Einstein College of Medicine of Yeshiva
                              University, USA
                              PCT Int. Appl., 28 pp.
SOURCE:
                              CODEN: PIXXD2
DOCUMENT TYPE:
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                              English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 2
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OTHER NAMES:
      3: PN: WO2005060986 SEQID: 3 claimed protein
      PROTEIN SEQUENCE; STEREOSEARCH
PATENT ANNOTATIONS (PNTE):
Sequence | Patent
Source | Reference
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Not Given | WO2005060986

|claimed SEQID

SEQ 1 EGTFTSDVSS YLEGQAAKEF IAWLVKGRR

HITS AT: 1-29

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C146 H225 N39 O45

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-D

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

ACCESSION NUMBER: 149:260057 CA TITLE:

GLP-1 (9-36) and its variants for inhibiting hyperglycemia or free fatty acid-induced reactive

oxygen formation in mammalian cells and thereby

preventing disease

INVENTOR(S): Brownlee, Michael A.

PATENT ASSIGNEE(S): Yeshiva University, USA; Albert Einstein College of

Medicine

SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.

Ser. No. 582,116.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

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REFERENCE 2

ACCESSION NUMBER: 143:91055 CA

TITLE: Glp-1 (9-36) methods and compositions

INVENTOR(S): Brownlee, Michael A.

PATENT ASSIGNEE(S): Albert Einstein College of Medicine of Yeshiva

University, USA

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

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A1 20060920 EP 2004-813201 20041207
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L1
RN
             683285-55-4 REGISTRY
CN
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                                       1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
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ACCESSION NUMBER: 140:380655 CA
TITLE:
                                                               GLP-1 derivatives and transmucosal absorption
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                                                                Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;
INVENTOR(S):
                                                                 Takeda, Motohiro; Jomori, Takahito
                                                               Sanwa Kagaku Kenkyusho Co., Ltd., Japan
PATENT ASSIGNEE(S):
                                                                PCT Int. Appl., 48 pp.
SOURCE:
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DOCUMENT TYPE:
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LANGUAGE:
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FAMILY ACC. NUM. COUNT: 1
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TITLE:
                                             preparations thereof
INVENTOR(S):
                                             Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;
                                             Takeda, Motohiro; Jomori, Takahito
PATENT ASSIGNEE(S):
                                             Sanwa Kagaku Kenkyusho Co., Ltd., Japan
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                                             PCT Int. Appl., 48 pp.
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DOCUMENT TYPE:
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LANGUAGE:
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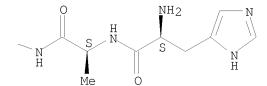
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Absolute stereochemistry.

PAGE 1-B

PAGE 1-D



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

ACCESSION NUMBER: 140:380655 CA

TITLE: GLP-1 derivatives and transmucosal absorption

preparations thereof

INVENTOR(S): Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;

Takeda, Motohiro; Jomori, Takahito

PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co., Ltd., Japan

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

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                                            GLP-1 derivatives and transmucosal absorption
TITLE:
                                            preparations thereof
                                            Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;
INVENTOR(S):
                                            Takeda, Motohiro; Jomori, Takahito
                                            Sanwa Kagaku Kenkyusho Co., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                                            PCT Int. Appl., 48 pp.
                                            CODEN: PIXXD2
DOCUMENT TYPE:
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LANGUAGE:
                                            Japanese
FAMILY ACC. NUM. COUNT: 1
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TITLE:
                         GLP-1 derivatives and transmucosal absorption
                         preparations thereof
INVENTOR(S):
                         Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;
                          Takeda, Motohiro; Jomori, Takahito
                         Sanwa Kagaku Kenkyusho Co., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                         PCT Int. Appl., 48 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
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LANGUAGE:
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               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
REFERENCE 1
ACCESSION NUMBER:
                        140:380655 CA
TITLE:
                        GLP-1 derivatives and transmucosal absorption
                        preparations thereof
INVENTOR(S):
                        Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;
                        Takeda, Motohiro; Jomori, Takahito
PATENT ASSIGNEE(S):
                        Sanwa Kagaku Kenkyusho Co., Ltd., Japan
SOURCE:
                        PCT Int. Appl., 48 pp.
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CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

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REFERENCE 1

ACCESSION NUMBER: 140:380655 CA

TITLE: GLP-1 derivatives and transmucosal absorption

preparations thereof

INVENTOR(S): Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;

Takeda, Motohiro; Jomori, Takahito

PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co., Ltd., Japan

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

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RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE COVERS 1907 - 7 Mar 2010 VOL 152 ISS 11

FILE LAST UPDATED: 5 Mar 2010 (20100305/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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28653 HYPERGLYCEMIA

(HYPERGLYCEMIA OR HYPERGLYCEMIAS)

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=> 12 and (diabetes or hyperglycemia or stroke)

73 L2

173773 DIABETES

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(HYPERGLYCEMIA OR HYPERGLYCEMIAS)

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(STROKE OR STROKES)

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L6 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1180202 CAPLUS

DOCUMENT NUMBER: 149:418175

TITLE: Stable GLP-1 fusion peptides, their production and use

in treating diabetes and other disorders

INVENTOR(S): Wallrapp, Christine; Thoenes, Eric; Geigle, Peter

PATENT ASSIGNEE(S): Biocompatibles UK Ltd., UK

SOURCE: PCT Int. Appl., 86pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

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OTHER SOURCE(S):

The present invention provides novel fusion peptides having GLP-1 activity and enhanced stability in vivo, in particular resistancy to dipeptidyl peptidase IV. The fusion peptide comprises as component (I) N-terminally a GLP-1 (7-35, 7-36 or 7-37) sequence and as component (II) C-terminally a peptide sequence of at least 9 amino acids or a functional fragment, variant or derivative thereof. Component (II) is preferably a full or partial version of a homolog of native IP2 (intervening peptide 2). A preferred embodiment comprises the sequence GLP-1 (7-35, 36 or 37)/IP2homolog/GLP-1(7-35, 36 or 37) or GLP-2. The fusion peptide may be produced in engineered cells or synthetically and may be used for the preparation of a medicament for treating various diseases or disorders, e.g. diabetes type 1 or 2, apoptosis related diseases or neurodegenerative disorders. The present invention provides novel fusion peptides having GLP-1 activity and enhanced stability in vivo, in particular resistancy to dipeptidyl peptidase IV. The fusion peptide comprises as component (I) N-terminally a GLP-1(7-35, 7-36 or 7-37) sequence and as component (II) C-terminally a peptide sequence of at least 9 amino acids or a functional fragment, variant or derivative thereof. Component (II) is preferably a full or partial version of a homolog of native IP2 (intervening peptide 2). A preferred embodiment comprises the sequence GLP-1(7-35, 36 or 37)/IP2-homolog/GLP-1(7-35, 36 or 37) or GLP-2. The fusion peptide may be produced in engineered cells or synthetically and may be used for the preparation of a medicament for treating various diseases or disorders, e.g. diabetes type 1 or 2, apoptosis related diseases or neurodegenerative disorders.

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ANSWER 2 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                       2008:1179758 CAPLUS
DOCUMENT NUMBER:
                       149:418174
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TITLE: Stable GLP-1 fusion peptides, their production and use

in treating diabetes and other disorders

Wallrapp, Christine; Thoenes, Eric; Geigle, Peter INVENTOR(S):

PATENT ASSIGNEE(S): Biocompatibles Uk Ltd., UK

SOURCE: Eur. Pat. Appl., 83 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
      EP 2129687
                                 A2 20091209 EP 2008-734805
                                                                                          20080327
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                 SK, TR
                                                            EP 2007-6321 A 20070327 WO 2008-EP2414 W 20080327
PRIORITY APPLN. INFO.:
```

The present invention provides novel fusion peptides having GLP-1 activity AΒ and enhanced stability in vivo, in particular resistancy to dipeptidyl peptidase IV. The fusion peptide comprises as component (I) N-terminally a GLP-1(7-35, 7-36 or 7-37) sequence and as component (II) C-terminally a peptide sequence of at least 9 amino acids or a functional fragment, variant or derivative thereof. Component (II) is preferably a full or partial version of a homolog of native IP2 (intervening peptide 2). A preferred embodiment comprises the sequence GLP-1(7-35, 36 or 37)/IP2-homolog/GLP-1(7-35, 36 or 37) or GLP-2. The fusion peptide may be

produced in engineered cells or synthetically and may be used for the preparation of a medicament for treating various diseases or disorders, e.g. diabetes type 1 or 2, apoptosis related diseases or neurodegenerative disorders.

REFERENCE COUNT: THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS 11 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1157789 CAPLUS

149:395038 DOCUMENT NUMBER:

TITLE: Stable GLP-1 fusion peptides conjugated to synthetic or natural polymer(s), their production and use for

treating diabetes and other diseases

Wallrapp, Christine; Thoenes, Eric; Geigle, Peter INVENTOR(S):

PATENT ASSIGNEE(S): Biocompatibles UK Ltd., UK PCT Int. Appl., 122pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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KIND DATE APPLICATION NO. DATE
     PATENT NO.
                     A1 20080925 WO 2008-EP2278 20080320
     _____
     WO 2008113601
        W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
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     EP 1972349
                         A1 20080924 EP 2007-5831
                                                                  20070321
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                                                             A 20070321
W 20080320
PRIORITY APPLN. INFO.:
                                            EP 2007-5831
                                            WO 2008-EP2278
OTHER SOURCE(S):
                        MARPAT 149:395038
     The present invention provides fusion peptides having GLP-1 activity and
     enhanced stability in vivo, in particular resistancy to dipeptidyl
     peptidase IV conjugated to polymers, thereby forming conjugate mols.
     fusion peptide of the conjugate mol. comprises as component (I)
     N-terminally a GLP-1 (7-35, 7-36 \text{ or } 7-37) sequence and as component (II)
     C-terminally a peptide sequence of at least 9 amino acids or a functional
     fragment, variant or derivative thereof. A synthetic polymer and/or a
     protein, e.g transferrin or albumin, is covalently or non-covalently bound
     to the fusion peptide to form the conjugate mol. Component (II) is
     preferably a full or partial version of IP2 (intervening peptide 2). A
     preferred embodiment comprises the sequence GLP-1 (7-35, 36 or
     37)/IP2/GLP-1 (7-35, 36 or 37) or GLP-2 and a polymeric component, e.g. a
     natural or non-natural polymer. The fusion peptide may be produced in
     engineered cells or synthetically and is e.g. conjugated to the polymeric
     component by chemical synthesis. The conjugate mol. may be used for the
     preparation of a medicament for treating various diseases or disorders, e.g.
     diabetes type 1 or 2, apoptosis related diseases or
     neurodegenerative disorders.
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
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                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 4 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                         2008:1151323 CAPLUS
                         149:395037
DOCUMENT NUMBER:
TITLE:
                         Stable GLP-1 fusion peptides conjugated to synthetic
                         or natural polymer(s), their production and use for
                         treating diabetes and other diseases
                         Geigle, Peter; Wallrapp, Christine; Thoenes, Eric
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Biocompatibles Uk Limited, UK
SOURCE:
                         Eur. Pat. Appl., 120pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
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FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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KIND DATE APPLICATION NO. DATE
     PATENT NO.
    EP 1972349 A1 20080924 EP 2007-5831
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             AL, BA, HR, MK, RS
                                20080925
                                           WO 2008-EP2278
     WO 2008113601
                         A1
                                                                   20080320
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             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
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         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
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             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                         A1 20091125 EP 2008-734709
     EP 2121032
                                                                  20080320
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                                                              A 20070321
W 20080320
PRIORITY APPLN. INFO.:
                                            EP 2007-5831
                                            WO 2008-EP2278
AΒ
     The present invention provides fusion peptides having GLP-1 activity and
     enhanced stability in vivo, in particular resistancy to dipeptidyl
     peptidase IV, conjugated to polymers, thereby forming conjugate mols.
     fusion peptide of the conjugate mol. comprises as component (I)
     N-terminally a GLP-1(7-35, 7-36 or 7-37) sequence and as component (II)
     C-terminally a peptide sequence of at least 9 amino acids or a functional
     fragment, variant or derivative thereof. A synthetic polymer and/or a
     protein, e.g transferrin or albumin, is covalently or non-covalently bound
     to the fusion peptide to form the conjugate mol. Component (II) is
     preferably a full or partial version of IP2 (intervening peptide 2). A
    preferred embodiment comprises the sequence GLP-1(7-35, 36 or
     37)/IP2/GLP-1(7-35, 36 \text{ or } 37) or GLP-2 and a polymeric component, e.g. a
     natural or non-natural polymer. The fusion peptide may be produced in
     engineered cells or synthetically and is e.g. conjugated to the polymeric
     component by chemical synthesis. The conjugate mol. may be used for the
     preparation of a medicament for treating various diseases or disorders, e.g.
     diabetes type 1 or 2, apoptosis related diseases or
     neurodegenerative disorders.
REFERENCE COUNT:
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                         6
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 5 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
                         2008:981885 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         149:260057
TITLE:
                         GLP-1 (9-36) and its variants for inhibiting
                         hyperglycemia or free fatty acid-induced
                         reactive oxygen formation in mammalian cells and
                        thereby preventing disease
INVENTOR(S):
                        Brownlee, Michael A.
PATENT ASSIGNEE(S):
                        Yeshiva University, USA; Albert Einstein College of
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U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.

DOCUMENT TYPE: Patent

SOURCE:

Medicine

Ser. No. 582,116. CODEN: USXXCO

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	CENT :	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
		2008				A1		2008									0080	
	WO	2005				A1		2005									0041	
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	US	2008	0015	144		A1		2008	0117		US 2	007-	5821	16		2	0070	626
PRIO	RITY	APP	LN.	INFO	.:						US 2	003-	5292	47P]	P 2	0031	212
											WO 2	004-	US40	852	Ţ	W 2	0041	207
											US 2	007-	5821	16	i	A2 2	0070	626
	~		_ ~ _ ~		~						~		_ ~		~			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT Methods of inhibiting hyperglycemia-induced or free fatty acid-induced reactive oxygen formation in mammalian cells and mammals using the degradation product of glucagon-like peptide 1, GLP-1 (9-36) are provided. Various GLP-1 (9-36) variants are also provided. The cell is selected from the group consisting of a nerve cell, a renal mesangial cell, a pancreatic β cell, an adipocyte, a cardiac myocyte, an endothelial cell or a hepatocyte. In other embodiments, the invention is directed to methods of inhibiting the development of disease due to diabetes, impaired glucose tolerance, stress hyperglycemia , metabolic syndrome, insulin resistance, ischemia/reperfusion injury, endotoxin injury, non alc. steatohepatitis (NASH), alc. liver disease, and/or impaired glucose-stimulated insulin secretion in a mammal, or conditions resulting therefrom. The disease is an atherosclerotic, microvascular, or neurol. disease. More specifically the disease is selected from the group consisting of coronary disease, myocardial infarction, atherosclerotic peripheral vascular disease, cerebrovascular disease, stroke, retinopathy, renal disease, neuropathy, and cardiomyopathy.

L6 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:874968 CAPLUS

DOCUMENT NUMBER: 149:239352

TITLE: Fusion protein of human glucagon-like peptide-1 and

application thereof

INVENTOR(S): Luo, Xiaoxing; Hui, Hongxiang; Ma, Xue

PATENT ASSIGNEE(S): Fourth Military Medical University, Pla, Peop. Rep.

China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 21pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101220088	A	20080716	CN 2007-10018734	20070924
PRIORITY APPLN. INFO.:			CN 2007-10018734	20070924

OTHER SOURCE(S): MARPAT 149:239352

The title fusion protein consists of n segments of peptide A (GLP-1(7-37)[SEQID No.1]) and n segments of peptide B (GLP-2(1-33) [SEQID No.2]). The inventive fusion protein is a prodrug that releases human glucagon-like peptide-1 (GLP-1) after enzymic degradation and thereby has pharmacol. action, and has high bioactivity and long half-time in vivo. The fusion protein can be used to treat or prevent disease or dysfunction associated with GLP-1, especially non-insulin-dependent diabetes mellitus. The invention has the advantages of low cost, simple operation, readily available raw material, and possible commercialized production

ANSWER 7 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:586638 CAPLUS

DOCUMENT NUMBER: 148:554092

TITLE: Glp-1 derivative and use thereof

INVENTOR(S): Jomori, Takahito; Hayashi, Yuji; Makino, Mitsuhiro

PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co., Ltd., Japan

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
	WO	2008	0567	26		A1		2008	0515		——— WO 2	007-	JP71	 687		2	0071	108
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THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

46

ACCESSION NUMBER: 2007:1303151 CAPLUS

DOCUMENT NUMBER: 147:548045

REFERENCE COUNT:

TITLE: Spherical microcapsules comprising human mesenchymal stem cells expressing and secreting GLP-1 peptides and

uses in treating diabetes

INVENTOR(S): Geigle, Peter; Wallrapp, Christine; Thoenes, Eric;

Thuermer, Frank

PATENT ASSIGNEE(S): Biocompatibles UK Ltd., UK SOURCE: PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAI	ENT	NO.			KIN	D	DATE									ATE	
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OTHER SOURCE(S): MARPAT 147:548045

AB The present invention provides spherical microcapsules comprising at least one surface coating and a core, wherein the at least one surface coating comprises cross-linked polymers, and wherein the core comprises cross-linked polymers and cells capable of expressing and secreting a GLP-1 peptide, a fragment or variant thereof or a fusion peptide comprising GLP-1 or a fragment or variant thereof. The present application is furthermore directed to methods for production of these spherical microcapsules and to the use of these microcapsules e.g. in the treatment of type 2 diabetes, weight disorders, neurodegenerative disorders or for the treatment of disorders and diseases or conditions associated to apoptosis. The cells contained in the core of the spherical microcapsule are selected from human mesenchymal stem cells, including osteoblasts, chondrocytes, fat cells (adipocytes), or neuron-like cells including brain cells.

DOCUMENT NUMBER: 146:351951

TITLE: Glp-1 (glucagon-like peptide-1) fusion polypeptides

with increased peptidase resistance

INVENTOR(S): Geigle, Peter; Wallrapp, Christine; Thoenes, Eric

PATENT ASSIGNEE(S): Biocompatibles UK Limited, UK

SOURCE: Eur. Pat. Appl., 55pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	ΓΕΝΤ	NO.			KIN	D	DATE			APP	LICAT	ION	NO.		D	ATE	
	1767				A1		2007			EP	2005-	2071	8		2	0050	922
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	RW:	AT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FI,	FR,	GB,	GR,	HU,	IE,
											, RO,						
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											, TZ,						
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
EP	1926	748			A1		2008	0604		EΡ	2006-	7922	28		2	0060	922
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR	
JP	2009	5085	05		Τ		2009	0305		JΡ	2008-	5316	16		2	0060	922
ZA	2008	0034	88		Α		2009	1028		ZA	2008-	3488			2	0060	922
ΙN	2008	DN00	642		Α		2008	0711		IN	2008-	DN64	2			0080	
	2008				Α		2008				2008-					0080	
	1012				А		2008				2006-					0080	
	2008				Α		2008	0709			2008-					0080	
RIT	Y APP	LN.	INFO	.:							2005-					0050	
										-	2006-	-	-			0060	
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AB The present invention provides fusion peptides having GLP-1 activity and enhanced stability in vivo, in particular resistancy to dipeptidyl peptidase IV. The fusion peptide comprises as component (I) N-terminally a GLP-1(7-35, 7-36 or 7-37) sequence and as component (II) C-terminally a peptide sequence of at least 9 amino acids or a functional fragment, variant or derivative thereof. Component (II) is preferably a full or partial version of IP2 (intervening peptide 2). A preferred embodiment comprises the sequence GLP-1 (7-35, 36 or 37)/IP2/GLP-1(7-35, 36 or 37) or GLP-2. The fusion peptide may be produced in engineered cells or synthetically and may be used for the preparation of a medicament for treating various diseases or disorders, e.g. diabetes type 1 or 2, apoptosis related diseases or neurodegenerative disorders.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 10 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:736536 CAPLUS

DOCUMENT NUMBER: 145:159868

TITLE: Stem cell and/or progenitor cells transplantation and

methods for treating diabetes

INVENTOR(S):

INVENTOR(S): Harman, Mitchell
PATENT ASSIGNEE(S): Kronos Longevity Research Institute, USA
SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
-		 0791 0791	-		A2 A3		2006 2007	-		WO 2	006-	US26	26		2	0060	
		AE,	AG,	AL,	AM,	AT,	AU, DE,	•		•	•	•	•	•	•		
	CN, CO, GE, GH, KZ, LC, MZ, NA,			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		VN,	YU,	ZA,	ZM,	ZW	TJ,	·	·	·	ŕ	·	·	·	·	·	·
	RW:	•	•	•	•	•	CZ, MC,	•	•	•	•	•	•	•	•	•	•
		•	•	•			GN, NA,			•		•	•	•	•		
RTTY	∆ DD	,	,	,	,	,	TM,	,	,	,		6.4.6.4	76D		D 2	በበ5በ	122

PRIORITY APPLN. INFO.: US 2005-646476P

The present invention relates to treatments for diabetes, particularly type 1 diabetes of human. The invention relates to methods and compns. for administering donor cells (e.g., stem cells and/or progenitor cells) to a type 1 diabetic subject and differentiating the stem cells in vivo to produce insulin secreting cells. Certain aspects of the invention relate to kits including one or more donor cells and/or pancreatic differentiation factors and/or immunosuppressant agents.

ANSWER 11 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:209376 CAPLUS

DOCUMENT NUMBER: 144:247750

Induction of hormone gene expression and insulin TITLE:

secretion in pancreatic β cells by islet cell

autoantigen ICA512

Trajkovski, Mirko; Mziaut, Hassan; Solimena, Michele INVENTOR(S): PATENT ASSIGNEE(S): Technische Universitaet Dresden Medizinische Fakultaet

Carl Gustav Carus, Germany

SOURCE: Eur. Pat. Appl., 63 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. PATENT NO. DATE ____

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EP 1632245
                         A1 20060308 EP 2004-20912
                                                                    20040902
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
                        A1
                               20060323 CA 2005-2578940 20050902
     CA 2578940
     WO 2006029728
                         A1
                                20060323
                                           WO 2005-EP9473
                                                                    20050902
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                         A1 20070516 EP 2005-791045
     EP 1784207
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             BA, HR, MK, YU
     JP 2008511297
                         Τ
                                20080417
                                            JP 2007-528787
                                                                    20050902
     US 20090131309
                                            US 2008-574568
                          Α1
                                20090521
                                                                    20080201
                                                                A 20040902
PRIORITY APPLN. INFO.:
                                            EP 2004-20912
                                                                W 20050902
                                            WO 2005-EP9473
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
    Islet cell autoantigen ICA512 and C-terminal fragments derived from it are
     found to be capable of inducing insulin secretion and peptide hormone
     biosynthesis in islet cells or neurons. The protein may be cleaved with
     \mu calpain to generate a C-terminal fragment of that is targeted to the
     nucleus. It is preferred in accordance with the invention that said
     endocrine cells are \beta-cells and that said peptide hormone is insulin.
                               THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
OS.CITING REF COUNT:
                         2
                               (2 CITINGS)
REFERENCE COUNT:
                         6
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 12 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
                         2005:1311452 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         144:45723
TITLE:
                         Splice variants of members of the pancreatic peptide
                         family for use in therapeutic regulation of metabolism
                         Shemesh, Ronen; Kliger, Yossef; Neville, Lewis F.;
INVENTOR(S):
                         Bernstein, Jeanne; Eshel, Dani
                         Compugen Ltd., Israel
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 180 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                         ____
                                _____
                                            _____
     WO 2005118786 A2
WO 2005118786 A3
                         A2 20051215
A3 20080117
                                           WO 2005-IL588
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
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LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,

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ZA, ZM, ZW
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               RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
               MR, NE, SN, TD, TG, AP, EA, EP, OA
     US 20060052301 A1 20060309
                                                   US 2005-145463

      US
      2005-145463
      20050602

      US
      2004-576414P
      P
      20040603

      US
      2005-672987P
      P
      20050420

                                                                             20050602
PRIORITY APPLN. INFO.:
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     Splice variants of amylin and other members of the pancreatic polypeptide
     family, namely peptide YY, peptide Y, and neuropeptide Y, are identified.
     These variants of these proteins may be useful useful in the treatment of
     metabolic disorders (no data.). Levels of these proteins may be increased
     by direct administration, or by delivery of a suitable expression vector
     carrying the corresponding coding sequence. Alternatively, levels may be
     lowered by administration of an inhibitor such as an antibody.
     Administration of a peptide YY variant was effective in slowing weight gain
     in genetically obese mice.
OS.CITING REF COUNT: 1
                                   THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
                                    (1 CITINGS)
     ANSWER 13 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:961959 CAPLUS
DOCUMENT NUMBER:
                            143:261378
                            A method for the recombinant production of proteins
TITLE:
                            useful in treatment of obesity and diabetes
                            from the milk of transgenic animals, and therapeutic
                            applications
                            Olsen, Byron
INVENTOR(S):
PATENT ASSIGNEE(S):
                            Gtc Biotherapeutics, Inc., USA; Olsen, Byron
                            PCT Int. Appl., 103 pp.
SOURCE:
                            CODEN: PIXXD2
DOCUMENT TYPE:
                            Patent
LANGUAGE:
                            English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:
     PATENT NO. KIND DATE APPLICATION NO. DATE

      WO 2005079525
      A2
      20050901
      WO 2005-US5406

      WO 2005079525
      A3
      20061228

          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
               GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
               LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
               NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
               TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, SM, US
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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               MR, NE, SN, TD, TG
                        A1 20060817
                                                US 2005-58458
     US 20060182744
                                                                             20050215
                                                  US 2005-58458 20050215

US 2004-545790P P 20040219

US 2005-58458 A1 20050215
PRIORITY APPLN. INFO.:
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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AB The current invention provides a method for the production of therapeutic proteins useful in the treatment of obesity and related conditions through the use of transgenic animals, particularly, from the milk or other bodily fluid of the transgenic animals. In particular the current invention provides for the production of Leptin and other anti-aging mols. in the milk

of transgenic mammals, particularly non-human placental mammals and provides for-the use of such transgenic proteins in therapeutic applications or disease conditions. A nuclear transfer procedure can be conducted to generate a mass of transgenic cells useful for research, serial cloning, or other in vitro use. Another aspect of this invention is directed to a method for treating Type II diabetes mellitus comprising administering to a mammal a therapeutically effective amount of a transgenic protein of interest, a prodrug thereof, or a pharmaceutically acceptable salt thereof in addition to a modified lower dosing of insulin via pump means.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

ANSWER 14 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:904226 CAPLUS

DOCUMENT NUMBER: 143:243023

Vector constructs comprising mammary tissue-specific TITLE:

promoter for production of transgenic proteins useful

in the treatment of obesity and diabetes

INVENTOR(S): Olsen, Byron V.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 46 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO. KIND DATE DATE APPLICATION NO. _____ _____ US 20050186608 US 20050186608 A1 20050825 US 2005-60291 20050217 PRIORITY APPLN. INFO.: US 2004-545790P P 20040219

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Transgenic proteins therapeutically useful in the treatment of obesity and related conditions can be produced in and purified from the milk of transgenic animals. Transgene DNA constructs are described which are operatively linked to a mammary tissue-specific promoter (e.g., the β -casein promoter) which enable the transgenic protein product to be expressed in the milk of a transgenic non-human mammal. The peptides are made as transgenic proteins with a suitable transgenic partner such as human recombinant protein of interest.

ANSWER 15 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:588685 CAPLUS

DOCUMENT NUMBER: 143:91055

TITLE: Glp-1 (9-36) methods and compositions

INVENTOR(S): Brownlee, Michael A.

PATENT ASSIGNEE(S): Albert Einstein College of Medicine of Yeshiva

University, USA

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2005060986 A1 20050707 WO 2004-US40852 20041207 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

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LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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              EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
              RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
              MR, NE, SN, TD, TG
                                            CA 2004-2550217
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     EP 1701731
                           Α1
                                  20060920
                                              EP 2004-813201
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
                      A1 20080117
                                              US 2007-582116
     US 20080015144
     US 20080194483
                          A1
                                  20080814
                                               US 2008-8362
                                                                        20080110
                                                                  P 20031212
PRIORITY APPLN. INFO.:
                                               US 2003-529247P
                                                                   W 20041207
                                               WO 2004-US40852
                                               US 2007-582116
                                                                   A2 20070626
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     Methods of inhibiting hyperglycemia-induced or free fatty
     acid-induced reactive oxygen formation in mammalian cells and mammals
     using the degradation product of glucagon-like peptide 1, GLP-1 (9-36) are
     provided. Various GLP-1 (9-36) compns. are also provided.
                                 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
OS.CITING REF COUNT:
                          2
                                 (2 CITINGS)
REFERENCE COUNT:
                                 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                           6
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 16 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:485594 CAPLUS
DOCUMENT NUMBER:
                          143:32219
TITLE:
                          Analogs of glucagon-like peptide-1 for treatment of
                          metabolic, neurological, and aging-associated
                          disorders
                          Dong, Zheng Xin
INVENTOR(S):
PATENT ASSIGNEE(S):
                          Societe de Conseils De Recherches e d'Applications
                          Scientifiques, S.A.S., Fr.
SOURCE:
                          U.S., 174 pp., Cont.-in-part of U.S. Ser. No. 206,601,
                           abandoned.
                          CODEN: USXXAM
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:
                         KIND DATE APPLICATION NO. DATE
     PATENT NO.
     US 6903186
                          B1 20050607 US 2001-857636
                                                                        20011102
                          A2
                                              WO 1999-EP9660
     WO 2000034331
                                 20000615
                                                                        19991207
                      А3
                               20001116
     WO 2000034331
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ,
             DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
         TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                               20031105 EP 2003-76490
     EP 1359159
                           A2
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     EP 1359159
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         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI, CY
                                  20040203
                                               ZA 2003-4047
     ZA 200304047
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                                                                        19991207
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RU 2	2288232	C2 :	20061127	RU	2003-112447		19991207
CN 1	1935839	Α :	20070328	CN	2006-1015955	5	19991207
ZA 2	2001004478	A	20031201	ZA	2001-4478		20010531
AU 2	2003202533	A1 :	20030612	AU	2003-202533		20030327
AU 2	2003202533	B2 :	20050421				
US 7	7268213	B2 :	20070911	US	2003-629261		20030728
US 2	20040018981	A1 :	20040129				
JP 2	2004131473	Α :	20040430	JР	2003-283316		20030731
JP 3	3934092	B2 :	20070620				
JP 2	2005132845	Α :	20050526	JP	2004-363831		20041216
BR 2	2005000392	Α :	20060926	BR	2005-392		20050215
US 2	20050233969	A1 :	20051020	US	2005-145782		20050606
US 7	7235628	B2 :	20070626				
JP 2	2006151988	A :	20060615	JP	2005-374822		20051227
JP 4	4386887	B2 :	20091216				
US 2	20080108566	A1 :	20080508	US	2007-781096		20070720
JP 2	2008001710	Α :	20080110	JP	2007-191581		20070724
US 2	20090197802	A1 :	20090806	US	2007-929013		20071030
PRIORITY	APPLN. INFO.:			US	1998-111255P	P	19981207
				US	1998-206601	В2	19981207
				WO	1999-EP9660	W	19991207
				ΑU	2000-19736	A3	19991207
				CN	1999-814187	A3	19991207
				EP	1999-963437	A3	19991207
				JP	2000-586773	A3	19991207
				RU	2001-118855	A	19991207
				US	2001-857636	A2	20011102
				US	2003-629261	A1	20030728
				JP	2003-283316	A3	20030731
				JP	2005-374822	A3	20051227
				US	2007-781096	A1	20070720
ASSIGNMEN	T HISTORY FOR	US PATENT	AWATI.ARI.E	TN I	SUS DISPLAY	FORMAT	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 143:32219

AB Peptide analogs of glucagon-like peptide-1 (GLP-1) with increased plasma half-lives that can be used to treat metabolic, neurol., and disease associated with aging are described. GLP-1 is metabolically unstable, with a plasma half-life of only 1-2 min in vivo, there is therefore a need for GLP-1 analogs that are more active or are more metabolically stable than native GLP-1. Specifically, analogs of human GLP-1(7-36)amide that are agonists for the GLP-1 receptor are described for the treatment of mammalian disorders such as type 1 and type 2 diabetes. The invention provides 773 different analogs, a preferred analog comprising (Ser8, Aib35) hGLP-1(7-36) NH2.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:347172 CAPLUS

DOCUMENT NUMBER: 142:405586

TITLE: Splice variants of preproglucagon, glucagon-like

peptide-1 and oxyntomodulin

INVENTOR(S): Shemesh, Ronen; Kliger, Yossef; Neville, Lewis F.;

Bernstein, Jeanne; Cohen-Dayag, Anat; Eshel, Dani

PATENT ASSIGNEE(S): Compugen Ltd., Israel SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

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PATENT NO.
                                                                 DATE
                       KIND DATE
                                      APPLICATION NO.
    WO 2005035761 A1 20050421 WO 2004-IL952 20041017
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
                                           US 2003-685712 A 20031016
US 2004-576414P P 20040603
PRIORITY APPLN. INFO.:
```

The present invention relates to alternative splice variants of AΒ preproglucagon, glucagon-like peptide-1 (GLP-1) and oxyntomodulin (OXM), vectors and compns. comprising same, and methods of use thereof. This invention provides peptides, nucleic acid sequences which encode same, analogs and derivs. thereof, antibodies, which specifically recognize the variant sequences, compns. comprising same and methods of use thereof. These splice isoforms showed activities in diabetes, nervous system disorders, post surgery treatment, obesity and cardiovascular disease.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 18 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:232600 CAPLUS

DOCUMENT NUMBER: 142:311675

TITLE: Use of polypyrimidine tract binding protein in insulin

secretory granule biogenesis, drug screening, and

therapy

INVENTOR(S): Solimena, Michele; Knoch, Klaus-Peter PATENT ASSIGNEE(S): Max-Planck-Gesellschaft zur Foerderung der

Wissenschaften e.V., Germany; Technische Universitaet

Dresden Medizinische Fakultaet Carl Gustav Carus

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

Patent DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PAI	PATENT NO.					D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
WO	2005	0232	 31		A1	_	2005	 0317	,	WO 2	004-	 EP10	 167		2	0040	910
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,
		SN,	TD,	ΤG													

EP 2003-20640

A 20030910

EP 2004-3429 A 20040216

The present invention relates to a method for stimulating production of AB secretory granules in peptide hormone-secreting endocrine cells or neurons comprising the step of promoting the presence of polypyrimidine tract binding protein (pPTB) or a biol. active fragment or derivative thereof in the cytoplasm of said cells or neurons. Preferably, the method alternatively or further comprises promoting the activity of pPTB or said biol. active fragment or derivative thereof in the cytoplasm of said cells or neurons. It is also preferred that said promotion comprises the promotion of the nucleocytoplasmic transport of pPTB. In another aspect, the invention relates to a method of screening for an agent capable of stimulating production of secretory granules in peptide hormone-secreting endocrine cells or neurons comprising the steps of (a) contacting a cell capable of forming secretory granules and expressing polypyrimidine tract binding protein (pPTB) or a biol. active fragment or derivative thereof with one or more compds.; and (b) assessing whether said one or more compds. promote the presence or activity of said polypyrimidine tract binding protein (pPTB) or said biol. active fragment or derivative thereof in the cytoplasm of said cell. The invention comprises further methods of screening for an agent useful as a cure for diabetes, sleeping disorders, or depression as well as various medical uses of an agent capable of the promotion/reduction of the presence or activity of polypyrimidine tract binding protein (pPTB) or of a biol. active fragment or derivative thereof. In alternative embodiments, the invention also includes the reduction or down regulation of pPTB or said biol. active fragment or derivative thereof. examples of the invention, glucose stimulated activation of pPTB, promoted the stability of ICA512, a receptor tyrosine phosphatase-like protein associated with insulin secretory granules, and upregulated ICA512 mRNA. Glucose stimulation promoted the binding of cytosolic pPTB to the 3'-UTR of ICA512 mRNA and pPTB binding activity correlated with ICA512 mRNA stability. Downregulation of pPTB by RNA interference decreased expression of secretory granule components with pPTB-binding sites in the 3'-untranslated region of their mRNAs. PPTB was phosphorylated on serine residue 16 in a cAMP and protein kinase A-dependent process that regulated translocation of pPTB between the nucleus and the cytoplasm.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:732210 CAPLUS

DOCUMENT NUMBER: 141:237101

TITLE: Methods to induce the conversion of intestinal cells

into insulin-producing cells with preproglucagon

fragments

INVENTOR(S): Taniguchi, Hideki; Suzuki, Atsushi; Eto, Yuzuru

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan SOURCE: Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 1454629	A2 20040908	EP 2004-5144	20040304
EP 1454629	A3 20041201		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR, BG, CZ, EE,	HU, PL, SK
WO 2004078195	A1 20040916	WO 2004-JP2001	20040220
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     US 20040214321
                                           US 2004-793677
                                                                   20040305
                        A1
                               20041028
     US 7423019
                          В2
                               20080909
                                                          A 20030307
PRIORITY APPLN. INFO.:
                                            JP 2003-61836
                                            JP 2003-358111
                                                               A 20031017
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     A partial peptide of a preproglucagon peptide comprising at least the
     amino acid sequence at positions 92-97 of a preproglucagon peptide is used
     as an effective ingredient of an antidiabetic drug. Methods for the
     application of this patent to insulin bioindustrial manufacture are also
     provided.
OS.CITING REF COUNT:
                               THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
                         2
                               (2 CITINGS)
REFERENCE COUNT:
                         2
                               THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 20 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
                        2004:718564 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        141:248703
                        Analogs of glucagon-like peptide-1 for treatment of
TITLE:
                        mammalian disorders
INVENTOR(S):
                        Dong, Zheng Xin
PATENT ASSIGNEE(S):
                        Societe de Conseils de Recherches et d'Applications
                        Scientifiques S.C.R.A.S., Fr.
                        PCT Int. Appl., 94 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                        1
PATENT INFORMATION:
                      KIND
                               DATE APPLICATION NO. DATE
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                               _____
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     WO 2004074315
                        A2 20040902
                                          WO 2004-US4421
     WO 2004074315
                        A3 20041125
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
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             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
            MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
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     CA 2513307
                               20040902
                                         CA 2004-2513307
                         Α1
                                                                   20040217
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     EP 1594529
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                               20100120
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     CN 1750842
                                20060322
                                           CN 2004-80004658
                                                                   20040217
                         Α
     JP 2007524579
                         Τ
                               20070830
                                           JP 2006-503594
                                                                   20040217
                             20090610
                                           EP 2009-156363
     EP 2067483
                         Α1
                                                                   20040217
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR, AL, LT, LV, MK
                       T
                            20100215 AT 2004-711811 20040217
     AT 455555
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TW 2004-93104154

US 2005-546303

20040219

20050819

В

A1

20070711

20060928

TW 283684

US 20060217300

PRIORITY APPLN. INFO.: US 2003-449203P P 20030219

EP 2004-711811 A3 20040217 WO 2004-US4421 W 20040217

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 141:248703

AB The present invention is directed to peptide analogs of glucagon-like peptide-1 (GLP-1), and more specifically human GLP-1(7-36) amide, and to methods of using such analogs to have agonist effect on the GLP-1 receptor in the treatment of mammalian disorders such as type 1 and type 2 diabetes. Since GLP-1 is metabolically unstable, having a plasma half-life of only 1-2 min in vivo, there is a need for GLP-1 analogs that are more active or are more metabolically stable than native GLP-1. The invention provides 773 different analogs, a preferred analog comprising (Ser8, Aib35) hGLP-1(7-36) NH2.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:648538 CAPLUS

DOCUMENT NUMBER: 141:191072

TITLE: Preparation and use of chemically-modified metabolites

of regulatory peptides

INVENTOR(S): Peri, Krishna; Habi, Abdelkrim; Gravel, Denis

PATENT ASSIGNEE(S): Theratechnologies Inc., Can.

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA]	CENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
WO	2004	0675	48		A2	_	2004	0812		 WO 2	004-	 CA13	1		2	0040	130
WO	2004	0675	48		A3		2004	1209									
WO	2004	0675	48		В1		2005	0217									
	W:	ΑE,	ΑE,	AG,	AL,	AL,	ΑM,	AM,	ΑM,	ΑT,	ΑT,	ΑU,	ΑZ,	ΑZ,	ΒA,	BB,	BG,
		BG,	BR,	BR,	BW,	BY,	BY,	BZ,	BZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	CR,
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		ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	HU,	ID,	IL,	IN,
		IS,	JP,	JP,	KE,	ΚE,	KG,	KG,	KP,	KP,	KP,	KR,	KR,	KΖ,	KΖ,	KΖ,	LC,
		LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,
		MZ,	MZ,	NA,	ΝI												
US	2005	0059	605		A1		2005	0317		US 2	004-	7689	74		2	0040	130
RITY	APF	LN.	INFO	. :						US 2	003-	4438	60P		P 2	0030	131

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S):

MARPAT 141:191072

AB The invention relates to peptides B-A-CO-P or their pharmaceutically-acceptable salts, where P is a dipeptidyl-peptidase (DPPIV) peptide metabolite of regulatory peptides obtained by cleavage of the two N-terminal amino acids, A is (hetero)alk(en)(yn)ylene or Ph and B is (un)substituted (hetero)aryl or cycloalkyl. More specifically, the invention relates to conferring biol. activity to metabolites of regulatory peptides by the covalent coupling of small mols. Thus, 3-(4-methoxyphenethylamino)-3-oxopropanoyl-GLP-1 (9-36) was prepared by solid-phase peptide chemical and N-acylation and shown to produce a more significant hypoglycemic response in mice compared to native GLP-1.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:370962 CAPLUS

DOCUMENT NUMBER: 140:380655

TITLE: GLP-1 derivatives and transmucosal absorption

preparations thereof

INVENTOR(S): Hayashi, Yuji; Makino, Mitsuhiro; Kouzaki, Toshiyuki;

Takeda, Motohiro; Jomori, Takahito

APPLICATION NO.

DATE

PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co., Ltd., Japan

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

KIND DATE

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

	ra.		.,			17.7.141		DAIE			ALLI	LICAI	1011	INO.		ט	AIL	
	WO	2004	0378	59		A1		2004	0506		WO 2	2003-	 JP13	020		2	0031	010
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
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			GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	, KE,	KG,	ΚP,	KR,	KΖ,	LC,	LK,
			LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	, MN,	MW,	MX,	MZ,	NI,	NO,	NΖ,
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			KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	, СН,	CY,	CZ,	DE,	DK,	EE,	ES,
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			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	, GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
	CA	2502	118			A1		2004	0506		CA 2	2003-	2502	118		2	0031	010
	AU	2003	2729	70		A1		2004	0513		AU 2	2003-	2729	70		2	0031	010
	ΑU	2003	2729	70		В2		2009	0528									
	ΕP	1559	724			A1		2005	0803		EP 2	2003-	7540	74		2	0031	010
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	СИ	1703	424			A		2005	1130		CN 2	2003-	8010	1244		2	0031	010
	CN 100354306							2007	1212									
		2006									US 2	2005-	5301	25		2	0051	027
	US	7291	594			В2		2007	1106									
PRIOR	RIT	Y APP	LN.	INFO	.:							2002-						
											WO 2	2003-	JP13	020		W 2	0031	010

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Disclosed is a GLP-1 derivative comprising a peptide having an amino acid sequence derived from the amino acid sequence of GLP-1 (7-35) by deletion, substitution and/or addition of one to several amino acids and having a GLP-1 activity to the C-terminus of which a sequence Waa-(Xaa)n-Yaa (wherein Waa represents Arg or Lys; Xaa represents Arg or Lys; n is an integer of from 0 to 14; and Yaa represents Arg, Arg-NH2, Lys, Lys-NH2 or Hse) is added. This derivative has a high transmucosal absorbability. Moreover, tolerance to dipeptidyl peptidase IV can be imparted to the derivative by substituting the 8-position of the GLP-1 amino acid sequence into Ser, while tolerance to trypsin can be imparted thereto by substituting the 26-position into Gln and the 34-position into Asn. The transmucosal absorbability of the above GLP-1 derivative can be further elevated by formulating into a preparation with the

use of a charge-controller fat emulsifier having a surface charge controlled to the neg. level.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2004:41516 CAPLUS

DOCUMENT NUMBER: 140:105831

TITLE: Pharmaceutical compositions and uses of GLP-1 mimetics

for the treatment of diabetes

INVENTOR(S): Steiness, Eva

PATENT ASSIGNEE(S): Zealand Pharma A/S, Den. SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                               KIND DATE
                                                         APPLICATION NO.
                                ____
      WO 2004005342
                                 A1 20040115 WO 2003-DK463
                                                                                        20030702
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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                 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                        A1 20040115 CA 2003-2490564 20030702
A1 20040123 AU 2003-243929 20030702
      CA 2490564
                                A1 20040123
B2 20090604
      AU 2003243929
      AU 2003243929
      EP 1525219
                                A1 20050427
B1 20090527
                                                         EP 2003-762471
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      JP 2006515267
                                 T 20060525 JP 2004-518465 20030702
      EP 2028192
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                                                         EP 2008-16668
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      AT 432289 T
                                        20090615 AT 2003-762471
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      ES 2327328
T3 20091028
ES 2003-762471
MX 2004012497
A 20050714
MX 2004-12497
US 20060057137
A1 20060316
US 2005-517563
HK 1075456
A1 20091231
HK 2005-106202
US 20090088369
A1 20090402
US 2009-202390
AU 2009-202390
AU 2009-202390
AU 2009-202390
                                                                                         20030702
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                                                                                         20050722
                                                          US 2008-277148 20081124

AU 2009-202390 20090615

US 2002-393917P P 20020704

US 2003-465613P P 20030424

AU 2003-243929 A3 20030702

EP 2003-762471 A3 20030702
PRIORITY APPLN. INFO.:
                                                                                    W 20030702
                                                           WO 2003-DK463
                                                           US 2005-517563 A1 20050708
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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AB The present invention relates to use of GLP-1 or a related mol. having GLP-effect for the manufacture of a medicament for preventing or treating diabetes in a mammal. The amount and timing of administration of said medicament are subsequently reduced to produce a 'drug holiday'. Practice of the invention achieves effective therapy without continuous drug exposure and without continuous presence of therapeutic levels of the drug. The invention also discloses a method of treating diabetes and related disorders in a mammal by administering glucagon like peptide (GLP-1) or a related mol. having GLP-1 like effect and thereby providing a therapeutically effective amount of endogenous insulin.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:571103 CAPLUS

DOCUMENT NUMBER: 139:122690

TITLE: Albumin fusion proteins for prolonged shelf-life of

therapeutic proteins

INVENTOR(S): Ballance, David James; Turner, Andrew John; Rosen,

Craig A.; Haseltine, William A.

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA; Delta Biotechnology

Limited; Principia Pharmaceutical Corporation

SOURCE: PCT Int. Appl., 598 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PAT	FENT	NO.			KIN		DATE			APPI	LICAT	ION :	NO.		D.	ATE	
	2003 2003				A2 A3		2003 2004			WO 2	2002-	 US40	 891		2	0021	223
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		HR, LT,	HU, LU,	LV,	MA,	MD,	IS, MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,
		RU, YU,	,	•	SG,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
	RW:	GH,	GM,	KE,			MZ,										
					RU, GR,		TM,										
							GN,									,	·
CA	2471	363			A1		2003	0724			2002-					0021	
AU	2002	3645	86		A1						2002-				2	0021	223
ΕP	1463				A2		2004				2002-					0021	
	R:						ES,									MC,	PT,
				LT,			RO,										
	2005		60		Τ		2005				2003-					0021	
EP	1997				A1	~	2008				2008-			~=		0021	
	R:						CZ,				ES,	FI,	FR,	GB,	GR,	IE,	IT,
	2005					PT,	SE,				0004	7750	0.4		0	0040	011
	2005				A1		2005 2006			US Z	2004-	1152	04		2	0040	211
CO	7141 2006	1765	1 /		BZ 70		2006			TD 3	2005-	2656	4.0		2	0051	210
	2006		735 735		A A1		2006				2005-					0060	
	7592		155				2009			05 2	.000	4272	70		4	0000	300
	2006		396		B2 A1		2006			IIS 2	2006-	4293	73		2	0060	508
	7238		550		B2		2007			00 2	.000	12,5	, 5		_	0000	300
	2008		886		A1		2008			US 2	2006-	4293	74		2	0060	508
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US	2007	0244	047		A1		2007	1018		US 2	2007-	7148	41		2	0070	307
US	2007	0259	815		A1		2007	1108		US 2	2007-	7834	19		2	0070	409
US	2008	0146	503		A1		2008	0619		US 2	2007-	7726	43		2	0070	702
US	2008	0153	751		A1		2008	0626		US 2	2007-	9298	28		2	0071	030
US	2008	0161	243		A1		2008	0703		US 2	2007-	9297	14		2	0071	030
	2008				A1		2008				2007-					0071	
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	2009				A1		2009				2007-					0071	
US	2009	0099	073		A1		2009	0416		US 2	2007-	9299	46		2	0071	030

US 20080194481 A1 20080814 US 2007-932823 20071031 A JP 2009213477 20090924 JP 2009-109615 20090428 US 2001-341811P P
US 2002-350358P P
US 2002-351360P P
US 2002-359370P P
US 2002-360000P P
US 2002-360000P P PRIORITY APPLN. INFO.: P 20011221 20020124 20020128 20020226 20020228 P 20020327 P 20020408 US 2002-370227P US 2002-378950P P 20020510 US 2002-382617P P 20020524 US 2002-383123P P 20020528 US 2002-385708P P 20020605 US 2002-394625P P 20020710 US 2002-398008P P 20020724 US 2002-402131P P 20020809 US 2002-402708P P 20020813 US 2002-411355P P 20020918 US 2002-411426P P 20020918 US 2002-414984P P 20021002 US 2002-417611P P 20021011 US 2002-420246P P 20021023 P 20021105 US 2002-423623P A3 20021223 EP 2002-799966 JP 2003-560158 A3 20021223 WO 2002-US40891 W 20021223 US 2003-441305P Ρ 20030122 Р US 2003-453201P 20030311 US 2003-467222P P 20030502 US 2003-472816P P 20030523 US 2003-476267P P 20030606 US 2003-505172P P 20030924 US 2003-506746P P 20030930 WO 2004-US1369 A1 20040120
US 2004-542274P P 20040209
US 2004-775204 A1 20040211
US 2004-549901P P 20040305
US 2004-556906P P 20040329
P 20041217 US 2004-636603P P 20041217 US 2005-175690 A2 20050707
US 2005-707521P P 20050812
US 2005-712386P P 20050831
US 2005-732724P P 20051103
US 2006-776914P P 20060228
US 2006-781361P P 20060313
US 2006-429276 WO 2005-US4041 A2 20050209 US 2006-429276 US 2006-429373 A2 20060508 A3 20060508 US 2006-810182P P 20060602 P 20060615 US 2006-813682P US 2006-495624 A2 20060731

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT AB The present invention encompasses albumin fusion proteins. Many therapeutic proteins in their native state or when recombinantly produced are typically labile mols. exhibiting short shelf-lives, particularly when formulated in aqueous solns.; fusions of the therapeutic protein with human serum albumin have a longer serum half-life and/or stabilized activity in solution (or in a pharmaceutical composition) in vitro and/or in vivo than the corresponding unfused therapeutic mols. Thus, albumin fusion proteins are provided comprising granulocyte colony-stimulating factor, interleukin 2, parathormone, erythropoietin, interferon β , interferon $\alpha 2$, interferon A/D hybrid, a single-chain insulin analog, growth hormone, and

(7-36)GLP-1. Nucleic acid mols. encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Addnl. the present invention encompasses pharmaceutical compns. comprising albumin fusion proteins and methods of treating or preventing diseases, disorders or conditions related to diabetes mellitus using albumin fusion proteins of the invention.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L6 ANSWER 25 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:571004 CAPLUS

DOCUMENT NUMBER: 139:122689

TITLE: Albumin fusion proteins for prolonged shelf-life of

therapeutic proteins

INVENTOR(S): Rosen, Craig A.; Haseltine, William A.

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA

SOURCE: PCT Int. Appl., 1086 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PA'					KIND DATE			APPLICATION NO.						DATE				
					A2 20030724				WO 2002-US40892					20021223				
	₩:	CO, HR, LT, RU,	CR, HU, LU,	CU, ID, LV, SE,	CZ, IL, MA,	DE, IN, MD,	AU, DK, IS, MG, SL,	DM, JP, MK,	DZ, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,	GM, LS, RO,	
	R₩:	KG, FI,	KZ, FR,	MD, GB,	RU, GR,	TJ,	MZ, TM, IT, GN,	AT, LU,	BE, MC,	BG, NL,	CH, PT,	CY, SE,	CZ, SI,	DE, SK,	DK, TR,	EE,	ES,	
AU	CA 2484556 AU 2002364587				A1 20030724 A1 20030730				CA 2002-2484556 AU 2002-364587 EP 2002-799967						20021223 20021223			
EP	1463 R:	AT,	BE,	CH,	DE,	DK,	ES, RO,	FR, MK,	GB, CY,	GR, AL,	IT, TR,	LI, BG,	LU, CZ,	NL, EE,	SE, SK			
EP	1997 R:	AT,					2008 CZ, SE,	DE,	DK,	EE,						0021 IE,		
					A1 20050310				US 2004-775180 JP 2005-365640									
US	7238	660			B2		2006 2007	1221 0703		US 2006-393893				20060331				
JP	US 20080293629 JP 2009213477 IORITY APPLN. INFO.:			A1 A		2008			US 2007-772591 JP 2009-109615 US 2001-341811P			20090428						
										US 2 US 2 US 2 US 2 US 2 US 2	002- 002- 002- 002-	3593 3600 3675 3702	70P 00P 00P 27P		P 2 P 2 P 2 P 2	0020 0020 0020 0020 0020 0020	226 228 327 408	

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P
US 2002-398008P
                     20020724
                P
US 2002-402131P
                     20020809
                Р
US 2002-402708P
                     20020813
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US 2002-411355P
                Р
US 2002-414984P
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US 2002-417611P
                     20021011
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US 2002-420246P
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US 2002-423623P
                P 20021105
                P 20020128
US 2002-351360P
US 2002-382617P
                P 20020524
US 2002-383123P
                P 20020528
US 2002-385708P
US 2002-394625P
                P 20020605
                P 20020710
US 2002-411426P
                 P 20020918
EP 2002-799966
                A3 20021223
JP 2003-560158
                 A3 20021223
WO 2002-US40892
                 W 20021223
US 2004-775180
                 A1 20040211
US 2006-393893
                  A1 20060331
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The present invention encompasses albumin fusion proteins. Many therapeutic proteins in their native state or when recombinantly produced are typically labile mols. exhibiting short shelf-lives, particularly when formulated in aqueous solns.; fusions of the therapeutic protein with human serum albumin have a longer serum half-life and/or stabilized activity in solution (or in a pharmaceutical composition) in vitro and/or in vivo than the corresponding unfused therapeutic mols. Thus, albumin fusion proteins are provided comprising interferon β , interferon $\alpha 2$, insulin, bone morphogenetic protein 9, glucagon-like peptide-I(7-36), a hybrid interferon A/D, and exendin 4. Nucleic acid mols. encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Addnl. the present invention encompasses pharmaceutical compns. comprising albumin fusion proteins and methods of treating or preventing diseases, disorders or conditions related to diabetes mellitus using albumin fusion proteins of the invention.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L6 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:566074 CAPLUS

DOCUMENT NUMBER: 131:194807

TITLE: Insulinotropic N-terminally truncated GLP-1 lipophilic

derivatives with protracted action

INVENTOR(S): Knudsen, Liselotte Bjerre; Huusfeldt, Per Olaf

PATENT ASSIGNEE(S): Novo Nordisk A/s, Den. SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT NO.				KIN	D	DATE			APPLICATION NO.						DATE			
					_													
WO 9943	705			A1		1999	0902	1	WO 1	999-	DK81			19	9990:	225		
W:	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,		
	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,		
	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,		
	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,		

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TR, TT, UA, UG, UZ, VN, YU, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9926105 A 19990915 AU 1999-26105 19990225
EP 1056774 A1 20001206 EP 1999-906075 19990225
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
     JP 2002508162 T 20020319
                                              JP 2000-533455 19990225
PRIORITY APPLN. INFO.:
                                              DK 1998-264
                                                                  A 19980227
                                              DK 1998-509
                                                                 A 19980408
                                              WO 1999-DK81
                                                                  W 19990225
OTHER SOURCE(S):
                         MARPAT 131:194807
     The present invention relates to N-terminally truncated derivs. of human
     glucagon-like peptide-1 (GLP-1) and analogs thereof having a protracted
     profile of action, as well as the use of such derivs. in pharmaceutical
     compns. for the treatment of obesity, insulin dependent or non-insulin
     dependent diabetes mellitus. The GLP-1 derivs. have a
     lipophilic substituent attached to at least one amino acid residue.
OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS
                                RECORD (10 CITINGS)
REFERENCE COUNT:
                          7
                                THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 27 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:580232 CAPLUS
                          121:180232
DOCUMENT NUMBER:
ORIGINAL REFERENCE NO.: 121:32751a,32754a
TITLE:
                         Preparation of glucagon-like peptide and
                          insulinotropin derivatives for treating type II
                          diabetes.
                         Andrews, Glenn C.; Daumy, Gaston O.; Francoeur,
INVENTOR(S):
                         Michael L.; Larson, Eric R.
                         Pfizer Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 30 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                  KIND DATE APPLICATION NO. DATE
     PATENT NO.
                         A1 19931223 WO 1993-US3388
         W: AU, BR, CA, CZ, DE, JP, KR, NO, NZ, PL, RU, SK, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9340275
                                                                     19930414
                          A 19940104 AU 1993-40275
     AU 671117
                         В2
                                19960815
     EP 646128
                         A1 19950405 EP 1993-909505
                                                                     19930414
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     JP 07504679 T 19950525 JP 1993-501448 JP 2575298 B2 19970122 BR 9306551 A 19980915 BR 1993-6551
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RU 1994-46251
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     PL 176007
                          В1
                                 19990331
                  C1 19990410
A2 20000105
     RU 2128663
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     EP 969016
                                                                     19930414
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE
     CA 2138161 C 20031021 CA 1993-2138161 19930414
IL 120890 A 20000831 IL 1993-120890 19930607
HU 64367 A2 19931228 HU 1993-1739 19930614
CN 1085913 A 19940427 CN 1993-108718 19930614
CN 1057098 C 20001004
NO 9404853 A 19941214 NO 1994-4853 19941214
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US 1992-899073 A1 19920615 PRIORITY APPLN. INFO.: EP 1993-909505 A3 19930414 A 19930414 WO 1993-US3388

A3 19930607 IL 1993-105928

MARPAT 121:180232 OTHER SOURCE(S):

H2NWCO2H (W = His-Asp-Glu-Phe-Glu-Arg-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arq-Gly, His-Asp-Glu-Phe-Glu-Arq-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg), and derivs. thereof, having pI ≤ 4 or ≥ 7 , were prepared having insulinotropic activity (no data). Thus, H-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-Gly-Arg-NH2 was prepared by solid phase synthesis using BOC-protected amino acids on benzhydrylamine resin. The invention also relates to new uses of certain known derivs. of insulinotropin and truncated insulinotropin to enhance insulin action in a mammal by iontophoretic administration of such derivs.

OS.CITING REF COUNT: THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD 4

(4 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 28 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

1991:1520 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 114:1520 ORIGINAL REFERENCE NO.: 114:327a,330a

Cloning of complementary DNAs encoding islet amyloid

polypeptide, insulin, and glucagon precursors from a

new world rodent, the degu, Octodon degus

AUTHOR(S): Nishi, Masahiro; Steiner, Donald F.

CORPORATE SOURCE: Howard Hughes Med. Inst., Univ. Chicago, Chicago, IL,

60637, USA

SOURCE: Molecular Endocrinology (1990), 4(8), 1192-8

CODEN: MOENEN; ISSN: 0888-8809

DOCUMENT TYPE: Journal LANGUAGE: English

The degu, Octodon degus, is a South American hystricomorph rodent that is of interest because it develops spontaneous diabetes mellitus and has been found to have islet amyloidosis. To help clarify these problems cDNAs encoding islet amyloid polypeptide (IAPP), insulin, and glucagon precursors were cloned from this species. The predicted amino acid sequence of degu IAPP is very similar to that of nonamyloid-forming guinea pig IAPP. In contrast, degu insulin and the C-terminal region of degu glucagon are highly divergent from those of other mammals, as is also the case in the guinea pig, suggesting the existence of some form of pos. evolutionary pressure on these hormones of carbohydrate metabolism in the hystricomorph rodents.

OS.CITING REF COUNT: THERE ARE 23 CAPLUS RECORDS THAT CITE THIS 23 RECORD (23 CITINGS)

=> d ibib hitseq 28

ANSWER 28 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:1520 CAPLUS

DOCUMENT NUMBER: 114:1520 ORIGINAL REFERENCE NO.: 114:327a,330a

TITLE: Cloning of complementary DNAs encoding islet amyloid

polypeptide, insulin, and glucagon precursors from a

new world rodent, the degu, Octodon degus

Nishi, Masahiro; Steiner, Donald F. AUTHOR(S):

CORPORATE SOURCE: Howard Hughes Med. Inst., Univ. Chicago, Chicago, IL, 60637, USA

SOURCE: Molecular Endocrinology (1990), 4(8), 1192-8

CODEN: MOENEN; ISSN: 0888-8809

DOCUMENT TYPE: Journal LANGUAGE: English IT 130589-22-9 130589-23-0

RL: PRP (Properties)

(amino acid sequence of)

RN 130589-22-9 CAPLUS

CN Glucagon, prepro- (Octodon degus) (9CI) (CA INDEX NAME)

SEQ 1 MKSIYFVAGL FVMLVQGSWQ HPLQDTEEKP RSFSTSQTDL LDDPDQMNED

- 51 KRHSQGTFTS DYSKFLDTRR AQDFLDWLKN TKRNRNEIAK RHDEFERHAE
- 101 GTFTSDVSSY LEGQAAKEFI AWLVKGRGRR DFPEEVTIVE ELRRRHADGS
- 151 FSDEMNTVLD HLATKDFINW LIQTKITDRK

RN 130589-23-0 CAPLUS

CN Glucagon, pro- (Octodon degus) (9CI) (CA INDEX NAME)

SEQ 1 HPLQDTEEKP RSFSTSQTDL LDDPDQMNED KRHSQGTFTS DYSKFLDTRR

- 51 AODFLDWLKN TKRNRNEIAK RHDEFERHAE GTFTSDVSSY LEGOAAKEFI
- 101 AWLVKGRGRR DFPEEVTIVE ELRRRHADGS FSDEMNTVLD HLATKDFINW
- 151 LIOTKITDRK

OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS

RECORD (23 CITINGS)

=> d ibib hitseq 27

L6 ANSWER 27 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:580232 CAPLUS

DOCUMENT NUMBER: 121:180232

ORIGINAL REFERENCE NO.: 121:32751a,32754a

TITLE: Preparation of glucagon-like peptide and

insulinotropin derivatives for treating type II

diabetes.

INVENTOR(S): Andrews, Glenn C.; Daumy, Gaston O.; Francoeur,

Michael L.; Larson, Eric R.

PATENT ASSIGNEE(S): Pfizer Inc., USA

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9325579	A1	19931223	WO 1993-US3388	19930414
W: AU, 1	BR, CA, CZ, DE	, JP, KR, NO), NZ, PL, RU, SK, U	IS
RW: AT,	BE, CH, DE, DK	, ES, FR, GB	G, GR, IE, IT, LU, M	IC, NL, PT, SE
AU 9340275	A	19940104	AU 1993-40275	19930414
AU 671117	B2	19960815		
EP 646128	A1	19950405	EP 1993-909505	19930414
R: AT,	BE, CH, DE, DK	, ES, FR, GB	B, GR, IE, IT, LI, L	U, NL, PT, SE

	075046				T	1995		JP	1993-501448			19930414
JP	257529	98			В2	1997	0122					
BR	930655	51			Α	1998	0915	BR	1993-6551			19930414
PL	17600	7			В1	1999	0331	PL	1993-306766			19930414
RU	212866	53			C1	1999	0410	RU	1994-46251			19930414
EP	969016	5			A2	2000	0105	EP	1999-110184			19930414
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CA	213816	51			С	2003	1021	CA	1993-2138161			19930414
IL	120890)			А	2000	0831	IL	1993-120890			19930607
HU	64367				A2	1993	1228	HU	1993-1739			19930614
CN	108591	13			А	1994	0427	CN	1993-108718			19930614
CN	105709	8			С	2000	1004					
NO	940485	53			A	1994	1214	NO	1994-4853			19941214
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								WO	1993-US3388	I	7	19930414
								IL	1993-105928	I	<i>£</i> 3	19930607

OTHER SOURCE(S): MARPAT 121:180232

IT 157507-31-8DP, resin bound

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as intermediate for drug for enhancing insulin action)

RN 157507-31-8 CAPLUS

CN Glucagon-like peptide 1 (Rana catesbeiana), 3-L-glutamic

acid-10-L-valine-16-glycine-17-L-glutamine-23-L-isoleucine-24-L-alanine-27-

L-valine-31-glycine-32-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFIAWLVKGR GR

Absolute stereochemistry.

NH₂

PAGE 1-C

PAGE 1-E

IT 157507-31-8P 157569-66-9DP, succinoylated 157569-66-9P 157629-57-7P 157629-58-8P

157629-61-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, for enhancing insulin action)

RN 157507-31-8 CAPLUS

CN Glucagon-like peptide 1 (Rana catesbeiana), 3-L-glutamic acid-10-L-valine-16-glycine-17-L-glutamine-23-L-isoleucine-24-L-alanine-27-L-valine-31-glycine-32-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFIAWLVKGR GR

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-D

RN 157569-66-9 CAPLUS

CN 7-36-Glucagon-like peptide 1 (Octodon degus), 36a-glycine-36b-L-arginine-(9CI) (CA INDEX NAME)

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFIAWLVKGR GR

Absolute stereochemistry.

PAGE 1-C

PAGE 1-E

PAGE 2-B

RN 157569-66-9 CAPLUS

CN 7-36-Glucagon-like peptide 1 (Octodon degus), 36a-glycine-36b-L-arginine-(9CI) (CA INDEX NAME)

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFIAWLVKGR GR

Absolute stereochemistry.

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RN 157629-57-7 CAPLUS

CN 7-36-Glucagon-like peptide 1 (Octodon degus), 36a-glycine-36b-L-arginine-36c-L-arginine- (9CI) (CA INDEX NAME)

SEQ 1 HAEGTFTSDV SSYLEGQAAK EFIAWLVKGR GRR

RN 157629-58-8 CAPLUS

CN Glucagon-like peptide 1 (Rana catesbeiana), 3-L-glutamic acid-10-L-valine-16-glycine-17-L-glutamine-23-L-isoleucine-24-L-alanine-27-L-valine-31-glycine-32-L-arginine-32a-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 HAEGTFTSDV SSYLEGOAAK EFIAWLVKGR GRR

RN 157629-61-3 CAPLUS

CN Glucagon-like peptide 1 (Rana catesbeiana),
N-(3-carboxy-1-oxopropyl)-3-L-glutamic
acid-10-L-valine-16-glycine-17-L-glutamine-20-[N6-(3-carboxy-1-oxopropyl)L-lysine]-23-L-isoleucine-24-L-alanine-27-L-valine-28-[N6-(3-carboxy-1-oxopropyl)-L-lysine]-31-glycine-32-L-arginine- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEO 1 HAEGTFTSDV SSYLEGOAAK EFIAWLVKGR GR

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> 12 and (diabetes or hyperglycemia or stroke)

73 L2

173773 DIABETES

28634 HYPERGLYCEMIA

35 HYPERGLYCEMIAS

28653 HYPERGLYCEMIA

(HYPERGLYCEMIA OR HYPERGLYCEMIAS)

46954 STROKE

3029 STROKES

48621 STROKE

(STROKE OR STROKES)

L7 28 L2 AND (DIABETES OR HYPERGLYCEMIA OR STROKE)

=> d ibib hitseq 26

L7 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:566074 CAPLUS

DOCUMENT NUMBER: 131:194807

TITLE: Insulinotropic N-terminally truncated GLP-1 lipophilic

derivatives with protracted action

INVENTOR(S): Knudsen, Liselotte Bjerre; Huusfeldt, Per Olaf

PATENT ASSIGNEE(S): Novo Nordisk A/s, Den. SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

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·	WO 9943705			A1 19990902				WO 1999-DK81					19990225						
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	JΡ	2002	5081	62		${f T}$		2002	0319	1	JP 2	000-	5334	55		19990225			
PRIOR	RIORITY APPLN. INFO.:				DK 1998-264					A 19980227									
										DK 1998-509					A 19980408				
	WO 1999-DK81								W 19990225										

OTHER SOURCE(S): MARPAT 131:194807

IT 240497-60-3DP, lipophilic derivs. 240497-61-4DP,

lipophilic derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of insulinotropic GLP-1 lipophilic derivs. with protracted action)

RN 240497-60-3 CAPLUS

CN L-Arginine, L-alanyl-L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl-L-arginylglycyl- (9CI) (CA INDEX NAME)

1 AEGTFTSDVS SYLEGQAAKE FIAWLVKGRG R

Absolute stereochemistry.

SEQ

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ОH

240497-61-4 CAPLUS

RNСИ

 $\label{eq:leucyl-L-alanyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-L-lysyl-L-alanyl-L-tryptophyl-L-leucyl-L-alysyl-L-lysyl-L-arginyl-lysyl-L-arginyl- (9CI) (CA INDEX NAME)$

SEQ 1 AEGTFTSDVS SYLEGQAAKE FIAWLVKGRG RR

Absolute stereochemistry.

NH₂

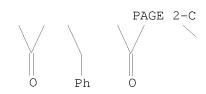
PAGE 1-C

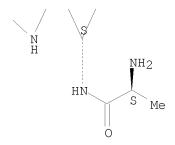












OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (10 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-23.80	-23.80

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